

# Budget Building Fundamentals

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# Session Overview

- Pre-proposal budget planning
- Budget categories and sources
- Beyond the numbers: the budget narrative
- Avoiding budget pitfalls
- Questions?

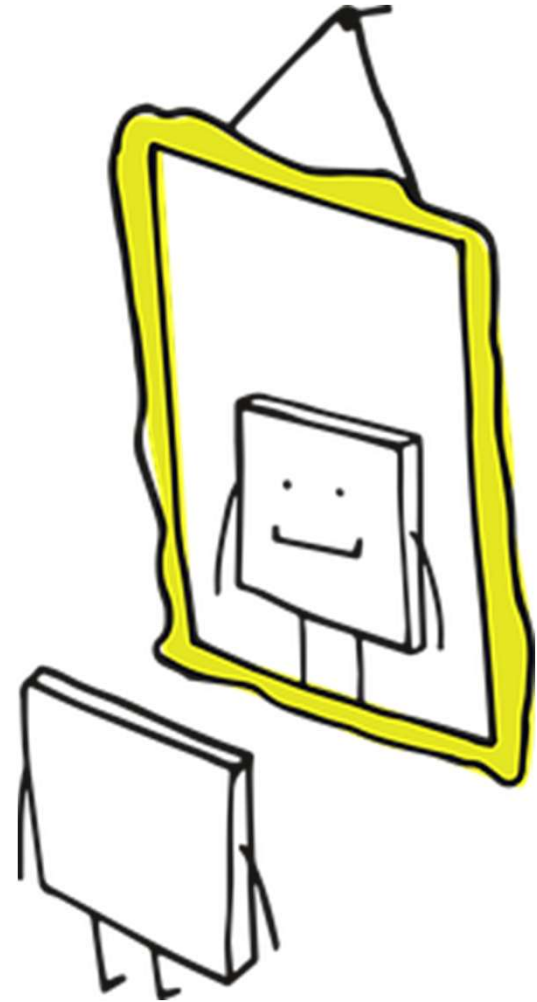


# Budget: Keep in mind...

The budget is another means for expressing your project. It should MATCH your narrative AND be consistent with:

- Sponsor guidelines\*
- University operating guidelines\*
- Federal guidelines (Uniform Guidance)\*

\*You don't have to navigate this process alone; your OSP can assist you!



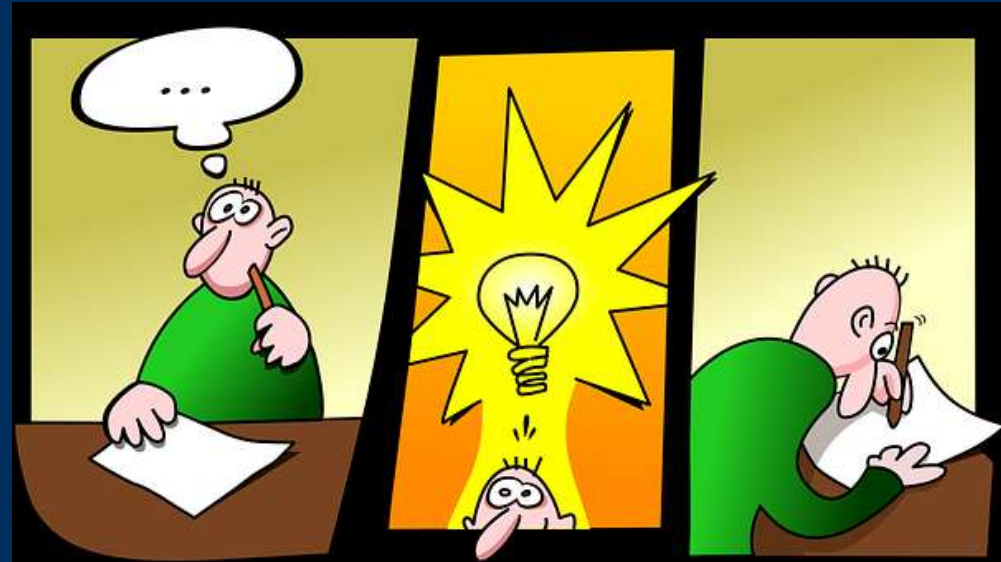
# Think budget... from the start

## During idea development

- Environmental scan
- Estimate for sponsor matchmaking

## Throughout proposal development

- Budgeting in parallel with writing
- Ongoing review for consistency



# Budget: For what? From whom?

Direct Costs: Costs which can be clearly identified and attributed to a specific research project or sponsored program.

Facilities & Administrative Costs (F&A): General support expenses which cannot be specifically identified to a singular project.

Cost Share: Project costs (either direct or F&A) not borne by the sponsor.

# Typical direct cost categories

- Personnel salary and wages
- Consumables, supplies, and materials
- Consultants and subcontracts
- Travel
- Capital equipment
- Participant support costs
- Other direct costs



# Personnel

- Faculty appointments
- Academic staff, postdocs, other research positions
- Project managers
- Students



# Faculty Effort: AY, Summer, Overload\*\*

- Academic year
- Summer months (2/9 rule)
- Overload/Supplemental
- Based on Institutional Base Salary (IBS)

**\*\*Work with your OSP staff to help determine the best time/effort for your project, and its calculation.**

## Academic year:

Course release = percent effort = AY months

- $12.5\% = 1$  course
- $12.5\% \times 9 \text{ mos} = 1.125$  AY months
- $\text{IBS} / 9 \text{ mos} \times 1.125$  months

Other AY time to be allocated = percent effort = AY months

- $10\% \times 9 \text{ mos} = .9$  AY months
- $\text{IBS} \times .9$  months

## Summer months:

Months of effort

- $\text{IBS} / 9 \times \text{proposed effort months}$

Percent of effort

- $50\% \text{ effort} \times 2 \text{ months} = 1$  month
- $\text{IBS} / 9 = 1$  month salary

Sample percentages only!



# Fringe benefits

Fringe benefits include items such as the employer's contribution to:

- retirement
- health insurance
- FICA and Medicare FICA
- unemployment compensation
- workers' compensation
- income continuation insurance and life insurance
- an amount for lump-sum payouts of vacation and sabbatical time accrued.

Requests for fringe benefits are calculated on the percent of salary being requested from the sponsor



# Consultants and subcontracts

- Meaningful effort or expertise provided by outside sources to accomplish project
- Should be named in proposal
- Consultants do not receive fringe benefits
- Applicant organization employees NOT categorized as consultants



# Non-people project costs

- Equipment
- Supplies and materials
- Travel
- Other direct costs



# Total Direct Costs (TDC)

The sum of all project costs, including both the costs to the sponsor and applicant cost share, prior to the calculation of indirect costs (or F&A)



# Facilities & Administrative Costs (F&A)

**aka Indirect Costs or Overhead**

The F&A rate is the mechanism used to reimburse the University for the infrastructure support costs associated with sponsored research and other sponsored projects.

- Each campus has established F&A rates that have been negotiated with the federal government.
- Budgeted F&A is calculated as a percent of allowable direct cost items/categories.
- How to calculate your project's F&A? What does the sponsor allow?

# Deciphering sponsor funding limits and F&A

## National Science Foundation

- RFP-listed amount totals typically include F&A

## National Institutes of Health

- RFP-listed amount totals typically are direct costs only (prior to the application of F&A to a budget)

## US Department of Education

- Unless you are applying to the IES (research), the most-utilized rate typically is the “training rate” of 8%

## Others: It depends

- Some sponsors disallow any inclusion of F&A
- Others cap it to a certain percentage of direct costs
- Others indicate a cap on F&A as a percentage of total project costs



# Costs of Federally Sponsored Research

The total cost of federally sponsored research includes a combination of both direct and facilities and administrative (F&A) costs. Both types of expenditures are key to an institution's ability to conduct cutting-edge research. F&A consists of the construction and maintenance costs of laboratories and high-tech facilities; energy and utility expenses; and safety, security, and other government-mandated expenses. These costs are real and research cannot be conducted without them.



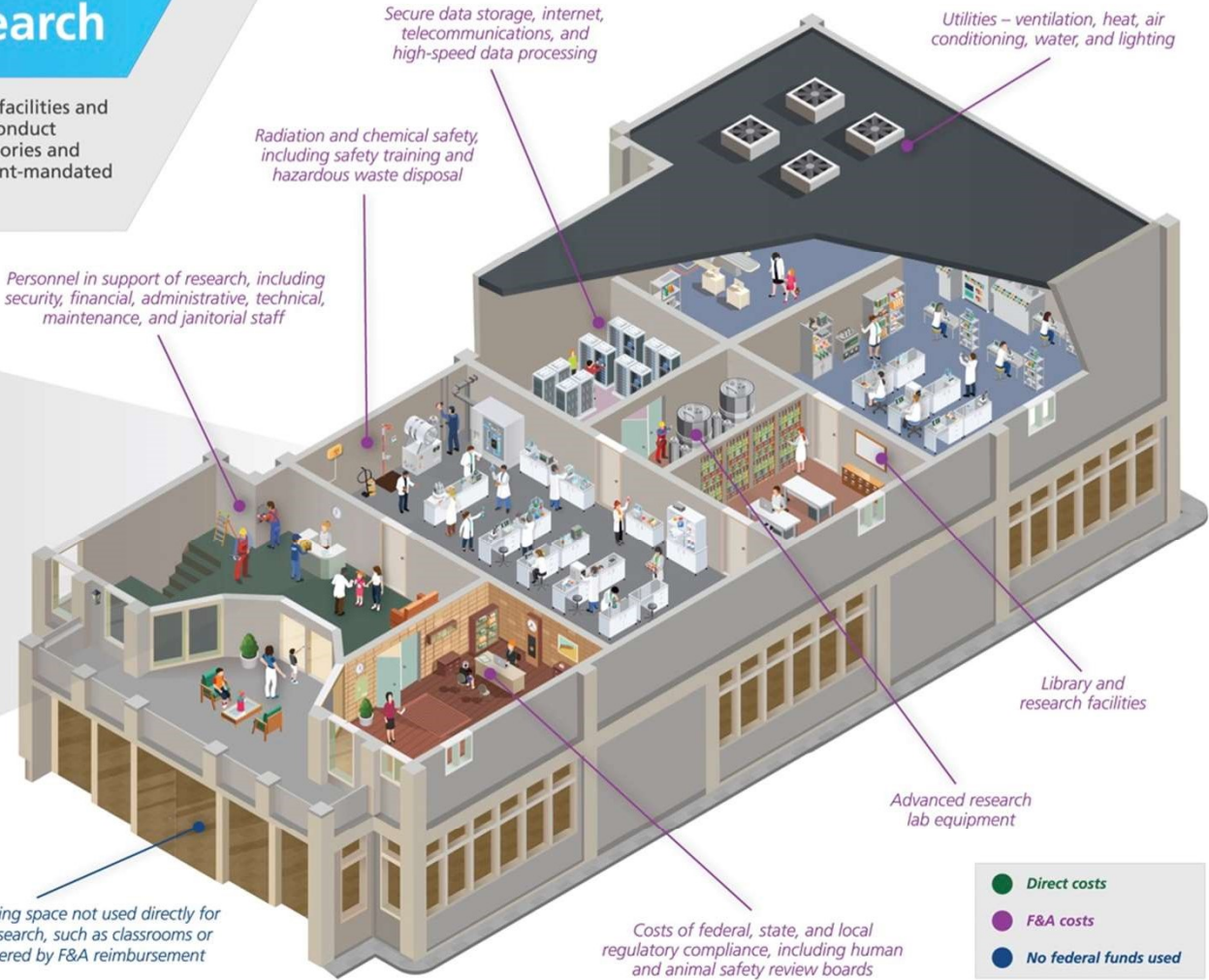
**Direct costs** - These expenses solely cover research and include lab supplies and equipment; salaries and stipends for researchers and graduate students; and travel costs for conducting and sharing research

Personnel in support of research, including security, financial, administrative, technical, maintenance, and janitorial staff

Radiation and chemical safety, including safety training and hazardous waste disposal

Secure data storage, internet, telecommunications, and high-speed data processing

Utilities – ventilation, heat, air conditioning, water, and lighting



Upkeep of any building space not used directly for federally-funded research, such as classrooms or lobbies, is **not** covered by F&A reimbursement

Library and research facilities

Advanced research lab equipment

Costs of federal, state, and local regulatory compliance, including human and animal safety review boards

- Direct costs
- F&A costs
- No federal funds used

## Picturing F&A



# Total Project Costs

The sum of total direct costs and indirect (or F&A) costs





# Cost sharing/matching

Mandatory: required by Sponsor; must be tracked and reported

Voluntary: applicant-initiated; not required by Sponsor; must be tracked and reported

Voluntary uncommitted: refers to any effort/resource beyond what is committed and budgeted; does not need to be tracked



# Budget preparation strategies

- Identify needs as you draft the narrative. Need it? Have it? Acquire it?
- Consider the project time frame.
- Show the calculation.
- Budget for inflation.
- Capital equipment? Get a quote!
- Don't forget dissemination or evaluation costs.
- Costs must be incurred during the award budget period.
- Work with your OSP office



# Pitfall: The budget “doesn’t add up”

- The budget doesn’t add up, literally
- Asked for too much funding
- Asked for too little funding
- Contained ineligible items/activities
- Budget items not linked to project activities
- Absence of budget items critical for project needs
- Training grant? Per participant costs are too little/much





# Budget Justification: What, Why, and How

- Describe the item
- What is it specifically?
- How did you arrive at the estimate?
- How does the item relate to your project?
- How does it fulfill your project objective?
- Explain the effort of requested personnel

# Pitfall: Not getting beyond the numbers in the budget justification



*"The reviewers thought fieldwork in the Galapagos was a bit extravagant. So Darwin's travel budget got slashed."*

Cartoon attributed to Dr. Eoin (Owen) O'Sullivan

- Simply stating is not justifying
- Neglecting to make a case for the cost
- Ignoring RFP info requirements
- Failing to connect the budget to the project
- Overlooking an opp to persuade the sponsor

# How to strengthen the justification

## Attempt #1

Personnel: The PI will commit 1.5 months per year to provide project oversight, supervise the student researchers, and submit annual project and fiscal reports. The budget includes \$10,543 per year in support of the PI's requested time.



## Attempt #2

Personnel: Dr. Roger Moore, PI for the proposed project, will commit 1.5 summer months effort per year to the project. In addition to overall project oversight and report production, he will supervise student researchers as they work through the compound characterization process for Research Objective 1; and analyze the assays developed for Research Objective 3. The salary request for Year 1 is \$10,543, based on his IBS of \$63,258. The requested amounts in out years include a standard annual cost of living increase of 3%.



# How to strengthen the justification

## Attempt #1

Travel: Two members of the project team will attend at least one professional conference per year of the project. Requested travel costs per person include \$500 registration, \$1000 hotel, \$300 per diem, and \$700 air and ground transportation.



## Attempt #2

Travel: Two members of the project team, including the student researchers, will present ongoing project results at one professional conference per year. Potential conference venues include the American Chemical Society and the American Society for Biochemistry and Molecular Biology. Requested costs per person are based on past conference venues: \$500 registration, \$1000 hotel, \$300 per diem, and \$700 air and ground transportation.

# How to strengthen the justification

## Attempt #1

Equipment: The budget includes a request of \$36,549 to purchase the Hisun Micro-Analyzer 850j for materials analysis. The Attachments section includes a quote for the equipment from the vendor.



## Attempt #2

Equipment: To accomplish the methods identified for Research Objectives 1 and 2, the project team requires a micro-analyzer for materials analysis, and one is not available internally or within a reasonable distance. The budget includes a request for \$36,549 to purchase the Hisun Micro-Analyzer 850j, a model that employs the level of magnification necessary for meaningful data collection. The cost includes installation and training support. The Attachments section includes a quote for the equipment from the vendor.



# Takeaways

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## Typical direct cost categories

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## Facilities & Administrative aka Indirect Costs or Overhead

The F&A rate is the mechanism used to reimburse infrastructure support costs associated with other sponsored projects.

- Each campus has established F&A rates that align with the federal government.
- Budgeted F&A is calculated as a percent of items/categories.
- How to calculate your project's F&A? What are the options?

## Cost sharing/matching

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## Budget Justification What, Why, How?

- Describe the project
- What is its purpose?
- How did you develop it?
- How does the project fit the objective?
- How does it fit the overall objective?
- Explain the personnel
- The budget doesn't add up, literally
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## Pitfall: The budget

## Pitfall: Not getting beyond the numbers in the budget justification



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# Questions?



# Webinar topics Fall 2020

- ~~Tools for Finding Funding: PIVOT/Grants Resource Center, **October 1**~~
- ~~Finding Funding: Spotlight on the National Science Foundation Major Research Instrumentation (MRI) Program, **October 7**~~
- ~~Common Grant Writing Pitfalls, **November 5**~~
- ~~Budget Building Fundamentals, **November 11**~~
- Finding Funding: Spotlight Freshwater Collaborative of Wisconsin, **December 3**



# Webinar topics Spring 2021

- Grants and Fellowships in the Humanities and Social Sciences, **February 4**
- Finding Funding: Spotlight the USDA, National Institute of Food and Agriculture (NIFA), **February 10**
- Analyzing RFPs for Sponsor Hot Buttons, **March 4**
- Collaborative Grantseeking: Accumulating Precious “Wins” & Avoiding Painful “Losses,” **March 10**
- REJECTED!—Time to Reconsider or to Revise and Resubmit?, **April 1**
- Finding Funding: Spotlight National Endowment for the Humanities (NEH) Summer Stipends, **April 7**



RFP



United States Department of Agriculture  
National Institute of Food and Agriculture



**REJECTED?**

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